

EXAMINING THE MODERATING EFFECT OF DEMOGRAPHIC FACTORS OF BOARD OF DIRECTORS ON THE ASSOCIATION BETWEEN CORPORATE GOVERNANCE AND EARNINGS MANAGEMENT

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ABSTRACT

This study aims to investigate whether corporate governance affects earnings management and if so whether such effect is moderated by age, gender, and educational background of board of directors. Using Moderated Regression Analysis, this study examines a sample of 55 companies listed in the Indonesia Stock Exchange for the period of 2005 to 2009. The results show that corporate governance negatively affects earnings management. Further analyses reveal that the association is moderated by age, gender, and educational background of board of directors.

Keywords: *corporate governance, earnings management, age, educational background, gender.*

INTRODUCTION

Earnings management has long been attracting the attention of accounting researchers to study. Healy and Wahlen (1999: 368) stated:

“Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.”

A study conducted by Dechow and Skinner (2000) concludes that earnings management in the financial reporting process occurs in many ways due to the availability of choices of accounting method to use and those of judgmental operational decisions like faster recognition of sales, slower recognition of research and development expenditures, and alter the shipping schedule.

Earnings management can be identified as one of the effects of agency conflict. This conflict exists when principal cannot perfectly verify and monitor the whole activities done by the agent so that the principal cannot see whether the activities can fully meet the prin-

cial's goals (Imhoff, 1978). Previous studies (e.g. Chtorou *et al.* 2001; Klein, 2006) indicate that corporate governance may mitigate such conflict (for a recent review with meta-analyses approach see Garcia-Meca and Sanchez-Ballesta, 2009).

Ethics literature (e.g. Elias, 2004) indicate that ethical values are associated with earnings management perception. Elias' (2004) study shows that CPAs employed in organizations with high (low) ethical standards viewed earnings management activities as more unethical (ethical). Other studies within ethics literature (e.g. Deshpande, 1997; Henle *et al.* 2005; Campbell and Minguez-Vera, 2008; Lane, 1988; Mayer, 1988; McCabe *et al.* 1991, Gray *et al.* 1994) found that age, educational background, gender may affect ethical values. Deshpande (1997) found that older managers (40 plus) perceived five practices (giving gifts/favors in exchange for preferential treatment, divulging confidential information, concealing one's error, falsifying reports, and calling in sick to take a day off) significantly more unethical than did younger managers. Henle *et al.* (2005) found that men are more likely to conduct an ethical deviance than women. Campbell and Minguez-Vera (2008) found that the gender composition can affect the quality of monitoring and company's financial performance. Lane (1988), Mayer (1988), McCabe *et al.* (1991) and Gray *et al.* (1994) suggest that business and accounting education has a negative effect on ethical development.

Having observed the literature on corporate governance, earnings management, and ethics, this study argues that corporate governance negatively affects earnings management and such effect is moderated by age, gender, and educational background of board of directors. Hence, this research aims to examine the moderating effect of the aforementioned demographic factors of board of directors on the association between corporate governance and earnings management. The results show

that corporate governance negatively affects earnings management, and this effect is moderated by age, gender, and educational background of board of directors.

This paper is expected to contribute to the corporate governance and ethics literature as this paper combining those two different topics by empirically examining the impact of the demographic factors on the relationship between corporate governance and earnings management. The rest of the paper is organized as follows. The next section is relevant literature and hypotheses development. This will be followed by research method. The paper ends with conclusions, limitations and suggestions for future research.

LITERATURE REVIEW

Agency Theory and Information Assymetry

In the agency theory, principal is the company's stockholder, and agent is the company's manager. The main goal of companies in common is maximizing the stockholders' welfare. So, ideally managers should do anything to fulfill stockholders' interests. However, this ideal situation is not necessarily met and often there are conflicts between manager and stockholder. This conflict is caused by different interests between the manager and the stockholder.

Jensen and Meckling (1976) argued that agency theory is directed at the ubiquitous agency relationship, in which one party (the principal) delegates work to another (the agent), who performs that work. Agency theory attempts to describe this relationship using the metaphor of a contract. The main conflict occurs when: (a) there are conflicts between the principal's and the agent's goal, (b) it is difficult and expensive for the principal to verify what agent is actually doing (Eisenhardt, 1989). Eisenhardt shows three assumptions of the human nature to explain the agency theory: (1) human generally like to fulfill their self interests, (2) human has a lim-

ited perception (bounded rationality), and (3) human always prevent themselves from risks (risk averse).

Warsono *et al.* (2009) stated that stockholders are able to do such ways to minimize the agency conflict using:

1. the voting right in the stockholders' general meeting to influence the composition of Board of Directors (BoD) and Board of Commissioners (BoC).
2. the lobbying approach to the managers about the unsatisfying issues.

Managers are assumed knowing the internal information and the company's prospect better than stockholder. So, manager should give the stockholder signals about the company's condition in many ways such as by providing financial reporting. The information known by stockholders are often not similar to the information managers have. This condition is so-called information asymmetry. This information asymmetry possibly gives manager the chance to conduct earnings management in order to mislead the stockholder about the company's economic performance.

One of the ways manager can do to minimize the information asymmetry is by disclosing information transparently because both principal (stockholder) and agent (manager) need to gain the symmetric information. In the situation of symmetric information exists, manager has less chance to conduct earnings management. The transparent information disclosure is in conformity to one of corporate governance principles: transparency.

Corporate Governance

Corporate governance arises when there is a separation between the company's ownership with the company's management. Corporate governance is necessary to reduce the agency conflict. Warsono *et al.* (2009) described the corporate governance as a system which includes functions operated by particular parties to maximize the value creation of

the company as both as economic and social entity through the generally accepted principles.

So far, there is no single agreed model of corporate governance. Nevertheless, most of developers of corporate governance model use the similar basic principles, such as transparency, independency, and accountability (Warsono *et al.* 2009). Anand (2008), for example, proposed four principles of corporate governance, namely:

1. Independency. Company can obtain good corporate governance when it has a good independency among the members of its board. Without independency, there will not be an effective management of executives nor a good BoD's duties accomplishment to the stockholders.
2. Accountability. Each person of the whole company should be accountable and show accountability of the mistakes which caused by his/her dereliction.
3. Responsibility. The responsibility of each person of the whole company is to make sure that all information which is required in decision making is available.
4. Reputation. Corporate governance is not only related to the development of a good business practice, but also related to a strong relationship creation between the corporation and social.

In terms of corporate governance as a system, according to the United Nations (2006), it is described that the word "board" has a different meaning between the one-tier system and two-tier system. In the one-tier system, "board" consists of executive and non-executive directors, while in the two-tier system, "board" means the executive directors. It also means the supervising directors who responsible to monitor the managers. Warsono *et al.* (2009) explained the unitary/one-tier system and the two-tier system as follows:

- One-tier system is applied by the United States and the United Kingdom. In this system, there's no Board of Commissioners (BoC). Companies only have BoD who is the combination of executive directors and non-executive directors.
- Two-tier system is applied by most of European countries (Denmark, Germany, and Holland), Japan, and Indonesia. In this system, there is Board of Commissioners (BoC) who perform supervising function to the BoD. The BoC is formed by the stockholders to oversee management in achieving the company's goals.

Earnings Management

According to Healy and Wahlen (1999), earnings management is motivated by many reasons, such as persuading the capital market perception, increasing management compensation, reducing the possibilities of contract violation, and preventing from intervention of regulation. DeGeorge *et al.* (1999) stated that earnings management arises from the game of information disclosure that executives and outsiders must play.

Jiraporn *et al.* (2008) proposed two perspectives of earnings management:

1. Opportunistic

Earnings management is said to be opportunistic when managers use the flexibility given by GAAP but there is distortion in the reported income. This opportunistic activity is reflected through financial manipulations and doing such income increasing or income decreasing discretionary accrual.

2. Beneficial

Earnings management is said to be beneficial because it can increase the information value of income by disclosing private information to stockholders and society. Besides that, the other benefit of earnings management is reducing the agency cost.

Hypotheses Development

We argue that earnings management can be mitigated by the implementation of good corporate governance because good corporate governance may limit the scope of managing income. A research conducted by Chen *et al.* (2007) showed that supervisor's independence, independent director's financial advance, and voluntary formation of independent directors are related to low possibility of earnings management. Similarly Murhadi (2009) stated that good corporate governance (GCG) is significantly related to the low earnings management.

The lower earnings management is attributable to various factors found by several previous studies. *First*, institutional ownership (Murhadi, 2009) and family-owned shares (Siregar and Utama, 2006). The presence of institutional ownership contributes to decreased earnings management practice, while share-ownership by family gives a positive impact to earnings management. *Second*, the composition of audit committee and the frequency of board's attendance in meeting (Xie *et al.* 2001). The composition of audit committee may affect the successfulness of error and fraud detection. Additionally that, the board's activities and frequency of board's attendance in meeting (board and committee meeting) may lead to more effective monitoring. Consequently, it is likely that the more boards attend the meeting, the less earnings management will be. *Third*, the presence of outside shareholders in the audit committee (Klein, 2006). The more outside shareholders present in the audit committee, the less possibility of earnings management occurrence. *Fourth*, ethical perspective (Wensheng and Jie, 2001; Kavousy *et al.* 2010). The tendency of manager to manage the earnings is related to his/her ethical perspective. When manager has a high perspective of ethics, s/he is not willing to do the earnings management. Conclusively, a meta-analysis by Garcia-Meca and Sanchez-Ballesta (2009) and a research

conducted by Chtorou *et al.* (2001) showed that corporate governance can effectively prevent earnings management. Consequently, the following hypothesis will be tested.

Ha₁: Corporate governance negatively affects earnings management

Borkowski and Ugras (1992); Elias (2004); and Henle *et al.* (2005) showed that age has a negative impact on ethics. The older age of managers, the less ethical they behave. Borkowski and Ugras (1992) said that the decreasing number of ethical behaviour is an effect of the reduction in idealistical view and the increasing in real life experience. Older people tend to use empirical variable while the youngsters use fewer empirical variables and more theoretic variables. This is in conformity to Marques and Azevedo-Pereira (2009) who identified the causes of decreasing number of ethical value and showed that as managers get older, the self passion to obey the company's rule gets lower. Marques and Azevedo-Pereira (2009) also said that age is positively related to relativism.

Thus, the second hypothesis of this research is:

Ha₂: For higher value of directors' average age, the effect of corporate governance on earnings management is less negative.

McPhail and Walters (2009) stated that accounting students become less ethical as they progress through their accounting education. Accounting students are less ethically aware than other students. Trevino (1992) explained that education is a proxy that can show the other kinds of life experiences. Hence, it is likely that people with a sufficient understanding related to the major s/he focuses on, in this case is accounting and business, they have high ability to use their knowledge about methods of financial reporting. This may raise a possibility to do a discretionary accrual that encourages the earnings management.

Chandra (2009) analyzed some factors that determine the voluntary disclosure in annual reports published in Indonesia Stock Exchange. He found that education level positively affects the voluntary disclosure on the annual report. The level of education is bordered by terms of economics and business. The presence of voluntary information disclosure reflects that the company has a better transparency than companies that do not voluntarily disclose additional information. Transparency is one of the corporate governance principles. When there are some principles followed by the whole company, they can reduce the earnings management.

The inexpediency of what people do with the ethics can contribute to a disrupt of good corporate governance in a company. By practicing this disrupted good corporate governance, the ability of corporate governance roles to reduce earnings management can be increased. Thus, the third hypothesis of this research is

Ha₃: For higher proportion of directors whose educational background is economics and business, the effect of corporate governance on earnings management is less negative.

The presence of women often considered to be a "glass ceiling" (Daily *et al.* 1999). Glass ceiling is a metaphor of the barrier that prevent women to reach a certain position in an organization. According to Burgess and Tharenou (2002) there are only few women placed in the board room all around the world. A research by Francoeur *et al.* (2007) about gender diversity in a corporate governance and top management of 200 US big companies showed two results: (1) operating activity of a business with complex environment results abnormal returns when it has a big proportion of female officers. (2) the presence of women on the board room can solve complex problems in the company. However, there are no significant relationship between percentage of

women in top management and company performance.

Deshpande (1997) argued that females are more ethical than males. Female managers perceived the acceptance of gifts and favors in exchange for preferential treatment significantly more unethical than did male managers. Although Borkowski and Ugras (1992) did not find any significant relationship between gender and idealism nor relativism, they showed that females expressed more definite ethical positions than males when assessing specific ethical behaviors. McPhail and Walters (2009) explained various women's nature that supports ethical business, such as willingness to blow the whistle, as follows:

“One theory of women as whistle-blowers is that of the insider-outsider. They are less likely to be part of the ‘old boy network’, so they don’t risk being pushed out of the club. Women may not be as sensitive as men to status in the workplace. And if they are not as committed to the hierarchy, they are more able to see the ramifications of a situation. Women may be natural whistle-blowers, because of the way they think and how they learned to play as children. Girls choose games with far fewer rules, which change if someone gets upset. Subsequently, as adults, women may be less likely to play by the rules if they don’t think the rules are right (page 28).”

By those images of women, we can assume that the nature of women is acting as whistle blowers who inform their bosses when there is a violation of the company's regulations. Because of this regulations appreciation, the practice of corporate governance of the company thus can be improved by the existence of women on the board. Accordingly, the fourth hypothesis is:

Ha₄: For higher number of female directors, the effect of corporate governance on earnings management is more negative.

RESEARCH METHOD

Population and Sample

The population of this study is manufacturing companies listed in the Indonesia Stock Exchange for the period from 2005 to 2009. The sampling method used is purposive sampling with the predetermined criteria. The criteria are:

1. The companies listed in Indonesia Stock Exchange (IDX) and publish annual reports for the period of 2006 to 2009 and financial reports for the period of 2005 to 2009.
2. Disclose the profile of Board of Directors particularly age, educational background, and gender in the annual reports.

The samples obtained based on the criteria above are as few as 55 companies. The accounting numbers in financial statements are obtained from OSIRIS database due to the more consistency in presentation compared to accounting numbers in financial statements published by IDX. This is used to measure the discretionary accrual which reflects earnings management. The annual reports for the period of 2006 to 2009 are obtained from the IDX. This is used to evaluate the quality of corporate governance and get information about the BoD's age, educational background, and gender.

Variables and Measurement

To measure earnings management, discretionary accrual is used as the proxy. The discretionary accrual model used is Kothari's model (Kothari *et al.* 2005) which is a modification of Jones model but it is better than the modified Jones model because it includes Return on Asset (ROA) which represents company performance.

1. Original Jones Model, developed in 1991

$$TA_{it} = \beta_0 + \beta_1 (1/AT_{it-1}) + \beta_2 \Delta REV_{it} + \beta_3 PPE_{it} + \epsilon_{it}$$

One of the weaknesses in this model is the assumption that there is no discretionary accrual comes from changes in revenue, so this model cannot detect earnings management that is occurred by manipulating sales.

2. Modified Jones Model

$$TA_{it} = \beta_0 + \beta_1 (1/AT_{it-1}) + \beta_2 (\Delta REV_{it} - \Delta AR_{it}) + \beta_3 PPE_{it} + \varepsilon_{it}$$

To identify the existence of earnings management that has done by manipulating sales revenue, credit sales are popped out.

3. Modified Jones Model with ROA

$$TA_{it} = \beta_0 + \beta_1 (1/AT_{it-1}) + \beta_2 (\Delta REV_{it} - \Delta AR_{it}) + \beta_3 PPE_{it} + \beta_4 ROA_{it} + \varepsilon_{it}$$

One of the advantages of using this model is the possibility of accepting the wrong H_0 or stating that there is no earnings management can be minimized. TA_{it} is total accrual, AT_{it} is company's assets in the beginning period, ΔREV is changes in sales from year t-1 to t, PPE is gross property, plant, and equipment, ΔAR is changes in account receivables from t-1 to t. ROA_{it} is income before extraordinary items for the year t. The first step to calculate the total accrual is to regress the whole items in the equation above then the residual can be found from this regression. Second, this residual has to be converted into absolute value. The absolute value of residual represents earnings management.

Corporate governance can be measured in many ways such as LLSV model (La Porta *et al.* 1999) as explained by Martynova and Renneboog (2010). This model was developed in USA, focused on corporate governance as a system that can provide protection to shareholders. This model is ignored because the LLSV model referred to national law environment in 1995 and did not reflects the actual

changes in the national legal system since 1996 so it needs reformation.

Martynova and Renneboog (2010) themselves developed three indexes of corporate governance that reflects national law qualities in each country researched in protecting shareholders and creditors. Comparing to LLSV rating model, this governance index has a larger scope of countries, those are USA and European countries. Most government system in USA and Europe followed Anglo-American model where the main ownership characteristic is widespread. This model is also ignored because Indonesia is a developing country where the most companies' characteristic of ownership is dominated by one concentrated major shareholder.

There is an index used to evaluate corporate governance in Indonesia that was developed by Indonesian Institute of Corporate Governance (IICG). IICG produced a measurement of corporate governance which is called Corporate Governance Perception Index (CGPI). The CGPI program has been conducted since 2001. But, companies that were willing to participate in this rating are only a few; moreover, they were not consistently participated from year to year. Therefore, we do not use this index.

In this study, we use an index of corporate governance (IGOV) developed by Da Silveira and Barros (2007). Initially, this model was used to get informations about corporate governance quality in Brazil. Brazil is a follower of one-tier model, while Indonesia follows the two-tier. In the IGOV, there are questions about segregation of duties between Chief Executive Officer (CEO) and chairman. In one-tier model, which has no board of commissioners, there are possibilities that CEO and chairman are not separated. The other way, in two-tier model, chairman is the head of commissioner, which called president commissioner. In Indonesia, almost none of the companies have the same person sitting as president commissioner and CEO because

president commissioner performs monitoring function while CEO performs executing function. CEO is so-called president director.

The characteristic of companies in Brazil is almost the same as companies in Indonesia. Brazil is a developing country and the most companies there is publicly opened companies with dominations of family-related ownership (Rabelo and Vasconcelos, 2002). Thus, we argue that the IGOV model is the best measure to asses Indonesian manufacturing companies' corporate governance quality with certain modifications, such as a question about

Generally Accepted Accounting Principles (GAAP) is modified into a question about conformity to Indonesian GAAP. We use a nominal scale of 1 to answer "yes" and 0 to answer "no".

In this research, the moderating variables used for analysis is the average age of BoD, proportion of directors whose educational background is economics and business, and the presence of women on the BoD. The proxies to measure the moderating variables can be seen in the table 1 below.

Table 1. Modified Index of Governance

| Governance Dimension | # | Governance Index (IGOV) questions |
|---------------------------------|----|--|
| Content of public information | 1 | Does the AR contain a specific section describing the corporate governance model and/or current governance practices? |
| | 2 | Does the AR or another document explain the executives' global remuneration (incentives system in place for executives)? |
| | 3 | Are the financial statements presented in Indonesian GAAP? |
| | 4 | Does the AR of the website include a section with profit estimates or forecasts of financial return (ROA, ROE, etc.)? |
| | 5 | Does the AR or some other corporate document present the value added destroyed by the business during the period based on economic profit measure (EVA, etc.)? |
| Board of directors structure | 6 | Does the firm have a board of directors comprised from 5 to 9 members? |
| | 7 | Does more than 80 percent of the board consist of external directors? |
| | 8 | Does the board of directors have a unified one-year term? |
| | 9 | The firms do not have a Shareholder Agreement (such agreements between large shareholders are often used to restrict board's independence and to lot management positions among these shareholders). |
| Ownership and control structure | 10 | Does the firm only issue common stock (voting shares - ON)? |
| | 11 | Does preferred stock correspond to less than 50 percent of total outstanding stock? |
| | 12 | Does the controlling stockholder possess less than 70 percent of total common stock? |
| | 13 | Is the difference of controlling shareholder's control rights (percent voting shares) and cash flow rights (percent of total shares) lower than 23 percent (controlling shareholders' wedge)? |
| | 14 | Does the firm voluntarily grant tag along rights to preferred shareholders? |

Source: Da Silveira and Barros (2007)

Table 2. Moderating Variables Measurement

| Moderating Variables | Measurement |
|--|--|
| Average Age | The average ages of whole Board of Directors. |
| Proportion of directors whose educational background is economics and business | The total number of directors whose educational background is economics and business divided with total number of whole directors (in percentage). |
| The presence of women on the Board of Directors | Dummy variable: give 1 as the code for “present” and 0 for “not present”. |

We analyze the variables using multiple regression analysis (to find the discretionary accrual) and Moderated Regression Analysis method (to examine the hypotheses). Before running the regression, the classical assumption test was performed to assure BLUE (Best Linear Unbiased Estimator). We find no problem with the classical assumptions. The equation for our Moderated Regression Analysis is

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 (X_1 * X_2) + b_6 (X_1 * X_3) + b_7 (X_1 * X_4) + e$$

Y is the dependent variable (earnings management), while X_1 is corporate governance, X_2 is average age of BoD, X_3 is the proportion of directors whose educational background is economics and business, and X_4 is the presence of women on BoD.

Results of Empirical Test

Our empirical findings are presented in table 3. From table 3, it can be seen that R Square value is 0.128 meaning that 12.8 percent variation of earnings management can be explained by our independent variables, while the rest is explained by other factors not included in our model. Additionally, the table shows that F-test coefficient is 3.231 ($p < 0.05$) meaning that the regression model can be used to predict earnings management. In other words, the regression model is feasible for use.

Table 3. The results of Moderated Regression Analysis with Earnings Management as Dependent Variable

| Independent Variable | Coefficient | P-value |
|----------------------|-------------|---------|
| Constant | 18.015 | 0.434 |
| CG | -0.378 | 0.004 |
| Age | -0.051 | 0.047 |
| EB | 0.188 | 0.017 |
| Gender | -0.281 | 0.038 |
| CG_Age | -0.273 | 0.044 |
| CG_EB | 0.088 | 0.021 |
| CG_Gender | -0.269 | 0.047 |
| Adjusted R Square | 0.128 | |
| F-test | 3.231 | 0.020 |

Where:

- CG : Corporate Governance
- Age : Average age of Board of Directors
- EB : Proportion of directors whose educational background is economics and business
- Gender : Presence of women on Board of Directors
- CG_Age : Interaction between corporate governance and average age of Board of Directors
- CG_EB : Interaction between corporate governance and proportion of directors whose educational background is economics and business
- CG_Gender: Interaction between corporate governance and presence of women on Board of Directors

Based on the findings above, several explanations can be outlined as follows:

1. The coefficient of corporate governance variable is negative with $p < 0.05$. This implies that the higher the value of corporate governance, the smaller the value of earnings management. Thus, the first hypothesis "Corporate governance negatively affects earnings management" is supported by our data.
2. The coefficient of the interaction between corporate governance and age (CG_Age) is negative and significant ($p < 0.05$). According to Hartmann and Moers (1999), the positive interaction happens when the coefficient of interaction ($X_1 \times X_2$) is positive. Thus, the second hypothesis "For higher value directors' average age, the effect of corporate governance on earnings management is less negative" is not supported by our data. However, our empirical result is consistent with the previous research conducted by Peterson *et al.* (2001); and Trevino (1986) who found that the older the managers, the higher the ethical value. When a manager becomes older, they tend to be more ethical, which means they tend to do such earnings management practices.
3. The coefficient of the interaction between corporate governance and educational background of BoD is positive and significant at $p < 0.05$. This positive coefficient defines a positive interaction (Hartmann and Moers, 1999). To that end, the third hypothesis " For higher proportion of directors whose educational background is economics and business, the effect of corporate governance on earnings management is less negative" is supported by our data.
4. The coefficient of the interaction between corporate governance and the presence of women in the BoD (CG_Gender) is negative and significant at $p < 0.05$. By this negative interaction, it can be inferred that the more women in the board, the more negative effect results from corporate governance on earnings management. Thus, the last hypothesis "For higher number of fe-

male directors, the effect of corporate governance on earnings management is more negative." is supported by our data.

The final finding is consistent with Francoeur *et al.* (2007) who found that women can bring benefits for the company to solve many problems. But, this is difficult to identify whether this problem solving is related to corporate governance or earnings management. There are two possible questions related to this: First, is women performance in the company increase the corporate governance? Second, is the problem that women can solve related to company's income, so the benefits here is to manage the earnings? However, the result of MRA shows that the presence of female directors strengthen the negative relationship between corporate governance and earnings management.

CONCLUSIONS AND LIMITATIONS

The objectives of this study are to investigate whether corporate governance affects earnings management and if so whether such effect is moderated by age, gender, and educational background of board of directors. Using a Moderated Regression Analysis method, this study finds that corporate governance negatively affects earnings management. Further analysis reveals that such association is moderated by age, gender, and educational background of board of directors.

The findings are able to explain that the better corporate governance implemented in a company, the less earnings management occurred. Further analysis suggests that the older the directors, the lower level of earnings management will be. Additionally, the results indicate that more directors with educational background of economics and business can increase the level of earnings management. Finally, this study finds that with good corporate governance, the higher number of female directors can minimize earnings management.

The results of the study, however, should be interpreted cautiously for the following reasons. This research uses IGOV (to measure the quality of corporate governance) which originally came from Brazil. This index is good but it cannot directly be matched with the two-tier structure. Although we have modified the index, this may still retain problems. The use of secondary data on this research has limitation, such as to obtain information about director's age, educational background, and gender, researchers have to find them on the annual report. The problem is that there are a few companies completely present the information needed for this research. Moreover, most companies did not present the pictures of Board of Directors on the annual reports or websites so many companies are eliminated. This may affect our results. Future research can use other measure of corporate governance which internationally develop for two-tier system and obtain more reliable and valid measures for age, educational background, and gender. Additionally, other variables which may affect the relationship between corporate governance and earnings management should be investigated.

REFERENCES

- Anand, S., 2008. *Essentials of Corporate Governance*. New Jersey: John Wiley & Sons, Inc.
- Borkowski, S. C., and Y. J. Ugras, 1992. "The Ethical Attitudes of Students as a Function of Age, Sex, and Experience". *Journal of Business Ethics*, 11 (12), 961.
- Burgess, Z., and P. Tharenou, 2002. "Women Board Directors: Characteristics of the Few". *Journal of Business Ethics*, 37 (1), 39-49.
- Campbell, K., and A. Mi'nguez-Vera, 2008. "Gender Diversity in the Boardroom and Firm Financial Performance". *Journal of Business Ethics* 83, 435-451.
- Chandra, A. S., 2009. "Analisis Faktor-faktor yang Berpengaruh Terhadap Luas Pengungkapan Sukarela dalam Laporan Tahunan Perusahaan Manufaktur yang Terdaftar di BEI [Analyses of the Affecting Factors of Voluntary Disclosure in the Annual Reports of Manufacturing Companies Listed in Indonesia Stock Exchange]". Undergraduate Thesis. Yogyakarta: Faculty of Economics and Business, Universitas Gadjah Mada.
- Chen, K. Y., R. J. Elder, and Y. M. Hsieh, 2007. "Corporate Governance and Earnings Management: The Implications of Corporate Governance Best-Practice Principles for Taiwanese Listed Companies". *Journal of Contemporary Accounting and Economics*, Forthcoming. Available at SSRN: <http://ssrn.com/abstract=981926>
- Chtourou, S. M., J. Bédard, and L. Courteau, 2001. "Corporate Governance and Earnings Management". Available at SSRN: <http://ssrn.com/abstract=275053> or doi:10.2139/ssrn.275053
- Da Silveira, A. Di M. and L. A. B. de C. Barros, 2007. "Corporate Governance Quality and Firm Value in Brazil. Available at SSRN: <http://ssrn.com/abstract=923310>
- Daily, C. M, T. Certo, and R. Dalton, 1999. "A Decade of Corporate Women: Some Progress in The Boardroom, None In The Executive Suite". *Strategic Management Journal*, 20, 1.
- Dechow, P. M, and D. J. Skinner, 2000. "Earnings Management: Reconciling the Views of Accounting Academics, Practitioners, and Regulators". *Accounting Horizons*. 14. (2), 235-250.
- Deshpande, S. P., 1997. "Managers' Perception of Proper Ethical Conduct: The Effect of Sex, Age, and Level of Education". *Journal of Business Ethics* 16 (1), 79-85.
- DeGeorge, F., J. Patel, and R. Zeckhauser, 1999. "Earnings Management to Exceed Thresholds". *Journal of Business*, 72 (1), 1-33.

- Eisenhardt, K. M., 1989. "Agency Theory: An Assessment and Review". *Academy of Management Review*, 14 (1), 57-74.
- Elias, R. Z., 2004. "The Impact of Corporate Ethical Values on Perceptions of Earnings Management". *Managerial Auditing Journal* 19 (1), 84-98.
- Francoeur, C., R. Labelle, and B. Sinclair-Desgagne', 2007. "Gender Diversity in Corporate Governance and Top Management". *Journal of Business Ethics*, 81 (1), 83-95.
- García-Meca, E., and J. P. Sánchez-Ballesta, 2009. "Corporate Governance and Earnings Management: A Meta-Analysis". *Corporate Governance: An International Review*, 17(5), 594-610.
- Gray, R. J. Bebbington, K. McPhail, 1994. "Teaching Ethics in Accounting and The Ethics of Accounting Teaching: Educating for Immorality and a Possible Case for Social and Environmental Accounting Education". *Journal of Accounting Education*. 3(1): 51-75.
- Hartmann, F.G.H., and F. Moers, 1999. "Testing Contingency Hypotheses in Budgetary Research: an Evaluation of the Use of Moderated Regression Analysis". *Accounting, Organizations and Society*, 24, 291-315.
- Henle, C. A., R. A. Giacalone, and C. L. Jurkiewicz, 2005. "The Role of Ethical Ideology in Workplace Deviance". *Journal of Business Ethics*, 56 (3), 219-230.
- Imhoff, E. A, 1978. "The Representativeness of Management Earnings Forecast". *The Accounting Review*, 53 (4), 836-850.
- Jensen, M. C. and W.H. Meckling, 1976. "Theory of The Firm: Managerial Behavior, Agency Cost and Ownership Structure". *Journal of Financial Economics*, 3, 305-360.
- Jiraporn, P., G. Miller, S. S. Yoon, and Y. S. Kim, 2008. "Is Earnings Management Opportunistic or Beneficial? An Agency Theory Perspective". *International Review of Financial Analysis*, 17, 622-634.
- Jones, K. L., V.K. Gopal, and K. D. Melendrez, 2008. "Do Models of Discretionary Accruals Detect Actual Cases of Fraudulent and Restated Earnings? An Empirical Analysis". *Contemporary Accounting Research*, 25 (2), 499-531.
- Kavously, E., H. R. V. Fard, S. J. Kangarluei, and A. Bayazidi, 2010. "The Relationship between Ethics Criteria and Earnings Management in Accepted Companies in Tehran Stock Exchange". *European Journal of Social Sciences*, 14 (3), 455.
- Klein, A., 2006. *Audit Committee, Board of Director Characteristics, and Earnings Management*. New York: New York University School of Law.
- Kusumastuti, S., and P. S. Supatmi, 2007. "Pengaruh Board Diversity Terhadap Nilai Perusahaan dalam Perspektif Corporate Governance" [The Impact of Board Diversity on Firm Value in the Perspective of Corporate Governance]. *Jurnal Akuntansi dan Keuangan*, 9 (2), 88-98.
- Kothari, S.P., A. J. Leone, and C. E. Wasley, 2005. "Performance Matched Discretionary Accrual Measures". *Journal of Accounting and Economics* 39, 163-197.
- Kusumaningrum, Armanita. (2010). "Pengaruh Kondisi Financial Distress terhadap Manajemen Laba." [The Impact of Financial Distress on Earnings Management]. Bachelor Thesis. Faculty of Economics and Business Universitas Gadjah Mada.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny, 1999. "Investor Protection and Corporate Governance". Dartmouth College-Tuck School of Business, EDHEC Business School, Harvard University-Department of Economics and University of Chicago-Booth School of Business.
- Labelle, R., R. M. Gargouri, and C. Francoeur, 2009. "Ethics, Diversity Management, and

- Financial Reporting Quality". *Journal of Business Ethics*, 93, 335–353.
- Lane, Michael S., D. Schaupp, and B. Parsons. "Pygmalion Effects: An Issue for Business Education and Ethics". *Journal of Business Ethics*; 7, 3, pg. 223.
- Martynova, M., and L. Renneboog, 2010. "A Corporate Governance Index: Convergence and Diversity of National Corporate Governance Regulations". *Center Discussion Paper Series No. 2010-17*, TILEC Discussion Paper No. 2010-01.
- Marques, P. A., and J. Azevedo-Pereira, 2009. "Ethical Ideology and Ethical Judgments in the Portuguese Accounting Profession". *Journal of Business Ethics*, 86, 227–242.
- McCabe, Donald L., J.M. Dukerich, and J.E. Dutton. "Context, Values, and Moral Dilemmas: Comparing the Choices of Business and Law School Students". *Journal of Business Ethics*, 10 (12), 951.
- McPhail, K., and D. Walters, 2009. *Accounting & Business Ethics: An Introduction*. New York: Routledge.
- Murhadi, W. R., 2009. "Studi Pengaruh Good Corporate Governance Terhadap Praktik Earnings Management pada Perusahaan Terdaftar di PT Bursa Efek Indonesia [Studying the Impact of Good Corporate Governance on the Companies Listed in Indonesia Stock Exchange]". *Jurnal Manajemen dan Kewirausahaan*, 11 (1), 1-10.
- Peterson, D., A. Rhoads, and B. C. Vaught, 2001. "Ethical Beliefs of Business Professionals: A Study of Gender, Age and External Factors". *Journal of Business Ethics*, 31 (3), 225-232.
- Rabelo, F. M. and F. C. Vasconcelos, 2002. "Corporate Governance in Brazil". *Journal of Business Ethics*, 37 (3), 321-335.
- Siregar, S. V. N. P and S. Utama, 2006. "Pengaruh Struktur Kepemilikan, Ukuran Perusahaan, dan Praktek Corporate Governance terhadap Pengelolaan Laba (Earnings Management)". [The Impact of Ownership Structure, Company Size, and Corporate Governance Practice on Earnings Management]. *Jurnal Riset Akuntansi Indonesia*. 9 (3), 307-326.
- The Indonesian Institute for Corporate Governance. 2009. *Corporate Governance Perception Index 2008: Good Corporate Governance dalam Perspektif Manajemen Strategik* [Corporate Governance Perception Index 2008: Good Corporate Governance in Strategic Management's Perspective]. Jakarta: Indonesian Institute for Corporate Governance.
- Trevino, L. K., 1992. "Moral Reasoning and Business Ethics: Implications for Research, Education and Management". *Journal of Business Ethics* 11 (5, 6), 445.
- United Nations. 2006. *Guidance on Good Practices in Corporate Governance Disclosure*. USA: New York and Geneva.
- Warsono, S., F. Amalia, and D. K. Rahajeng, 2009. *Corporate Governance Concept and Model: Preserving True Organization Welfare*. Yogyakarta: Center for Good Corporate Governance Universitas Gadjah Mada.
- Wensheng, S., and S. Jie, 2001. *Analysis on Factors Influencing Managers' Earnings Management Intentions*. University of California: Irvine, CA.
- Xie, B., W. N. Davidson III, and P. J. DaDalt., 2001. *Earnings Management and Corporate Governance: The Roles of the Board and The Committe*. Southern Illinois University, Illinois.